

REMARKS

Claim 1, 10 and 15 have been amended to more clearly define the invention. Claims 1-17 are pending in the application.

Figures 1-3 (b) stand objected to. The Office Action requires that a legend such as -- Prior Art -- be added to the subject drawings. Accordingly, figures 1-3(b) and figure 4 are so designated in a Submission of Proposed Drawing Changes transmitted herewith.

Claim 10 stands objected to as containing informalities. Claim 10 has been amended accordingly, and the objection is believed to be overcome.

Claims 1-17 stand objected to under 35 U.S.C. § 103 (a) over United States patent No. 5,886,659 to Pain (Pain) in view of United States patent No. 5,050,194 to Pickering et al. (Pickering).

The present invention relates to "a new way of transmitting data from an image chip." Page 1, lines 21-22. Claim 1 recites:

An image sensor, comprising: an image acquisition portion; an image processing portion, receiving image information from said image acquisition portion, said image processing portion including a CMOS circuitry with CMOS differential outputs having an output impedance; an image receiving portion, having an input impedance, receiving said image information from said CMOS outputs, said image processing portion producing a current mode output and said image receiving portion receiving said current mode output; and an active impedance matching device, said active impedance matching device being adapted to match said output impedance of said

image processing portion to said input impedance of said image receiving portion. (Emphasis added.)

The Pain reference relates to "on-focal-plane analog-to-digital conversion for current-mode imaging devices." The Office Action acknowledges that the Pain reference does not teach or suggest "that the CMOS outputs are differential outputs, and an impedance matching device matches said output impedance of said image processing portion to said input impedance of said image receiving portion." The Pickering reference is offered in an attempt overcome this deficiency. Even if, *arguendo*, the proposed combination were properly made, the combined references still do not teach every limitation of the claims. Pain and Pickering, whether taken alone or in combination, do not teach or suggest "an active impedance matching device, said active impedance matching device being adapted to match said output impedance of said image processing portion to said input impedance of said image receiving portion." Accordingly, the claim 1 invention is not anticipated or rendered obvious, and the rejection of claim 1 under 35 U.S.C. § 103 (a) over Pain in view of Pickering is overcome.

Furthermore, Applicant has carefully reviewed Pain and Pickering and has noted that the Office Action does not disclose any suggestion or motivation, within either Pain or Pickering or from another source, to modify Pain with the teaching of Pickering, or vice versa, to arrive at the claimed invention. Accordingly, the Office Action's conclusions of obviousness appear to be based upon impermissible hindsight by using the claims of the present invention as a road map to improperly modify the cited references.

The Courts have noted the ever present danger of using an Applicant's disclosure as a road map for rejecting patent claims based upon obviousness grounds. The Federal Circuit in In re Dembiczak, 175 F.3d 994, 1000 (Fed. Cir. 1999) stated "the

best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is a rigorous application of the requirement for showing [i.e., actual evidence] of the teaching or motivation to combine prior art references.” The Courts have increasingly emphasized the need for evidence of the motivation to combine/modify as well as evidence for reasons cited by the examiner for combining/modifying the prior art in rejecting claims based upon obviousness grounds.

In the present case, not only are there no reasons or motivations contained in the cited references to combine or modify the references, the Office Action has not cited any actual evidence or non-general citation which points to a specific section of the cited references or extrinsic evidence for providing the requisite motivation to combine or modify the references. Accordingly, the rejection of claim 1 based on a combination of Pain and Pickering is improper based upon the foregoing reasons and other reasons.

Claims 2-14 each depend, directly or indirectly, from claim 1 and incorporate every limitation thereof. Accordingly, the rejection of claims 2-14 under 35 U.S.C. § 103 (a) over Pain in view of Pickering are overcome for at least the reasons given above in relation to claim 1.

Claim 15 stands rejected under 35 U.S.C. § 103 (a) over Pain and Pickering in further view of Official Notice taken. Claim 15 recites:

An image sensor, comprising: an image acquisition portion; an image processing portion, said image processing portion being adapted to receive image information from said image acquisition portion at a differential input; and an impedance matching device, said impedance matching device being adapted to match an output impedance of said image acquisition portion to an input impedance of said image processing portion by adjusting bias current through at

least one biased device in a way that renders said input impedance relatively independent of an input current. (Emphasis added.)

The Office Action acknowledges that Pain and Pickering, taken alone or in combination, do not teach or suggest all elements as claimed that relies on taking Official Notice that "a variable resistor can be implemented using a transistor with adjustable bias current." Applicant respectfully notes that no support is provided for this conclusion, and respectfully requests documentary evidence to support the conclusion, if such as available. In the absence of such support, Applicant respectfully submits that the rejection of claim 15, and of claims of 16 and 17 which depend therefrom, should be withdrawn.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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Respectfully submitted,

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